

RIHE International Seminar Reports

THE CHANGING ACADEMIC PROFESSION OVER 1992-2007: INTERNATIONAL, COMPARATIVE, AND QUANTITATIVE PERSPECTIVES

**Report of the International Conference on
the Changing Academic Profession Project, 2009**

Organized by: Research Institute for Higher Education, Hiroshima University and
Research Institute for Higher Education, Hijiya University



Research Institute for Higher Education
HIROSHIMA UNIVERSITY

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Research Institute for Higher Education

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The Academic Profession in a Diverse Institutional Environment: converging or diverging values and beliefs?

Simon Schwartzman* and Elizabeth Balbachevsky**

Introduction: the expansion of higher education

This article is based on the data from two surveys of the academic profession in Brazil, one carried out in 1992, as part of the Carnegie Foundation comparative survey, and the other in 2007, within the CAP project.

Between 1992 and 2007, Brazilian higher education expanded very rapidly. The number of students tripled, the number of academics more than doubled, and the number of those with masters' or doctoral degrees increased fourfold. During these years, the population increased by 22.4%, reaching about 185 million in 2006, while GNP *per capita* increased by 77%. The high pace of growth in higher education, particularly at the graduate level, was an attempt to compensate for the very low enrolment rates, which went from 7.7% to 22.6% in the period, still very low by international or even regional standards.¹ One main barrier to the growth of higher education in Brazil is still the small number of qualified students coming out of secondary schools.

Most of the growth in higher education took place through the expansion of the private sector. In 1990, 62% of the students were enrolled in private

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¹ The gross rate compares the total number of students in higher education with the total number in the 18-24 age cohort. The net rate, that is the proportion of 18-24 year old students in the 18-24 age cohort, was 4.5% in 1992 and 12.5% in 2006. It is noteworthy that although student numbers have tripled since 1992, the proportion over 24 years old has remained well over 40%.

institutions; in 2006, this percentage had increased to about 77%. The standard description of the differences between the public and private institutions used to be as follows: public higher education in Brazil was free from tuition charges, most courses were provided during the day, and faculty members were civil servants with full-time contracts; to be admitted, students had to pass very competitive entrance examinations. Private institutions, on the other hand, charged for tuition, most of the instruction was given in the evenings, and admission was easy; most of the faculty worked part-time, and had no career plans or job security. Because of these differences, young students from higher economic and education backgrounds tended to enter public institutions, while older people, who need to work and whose education background limited their ability to compete, would enter the private sector. Tuition fees in the private sector could not be very high, as the students were relatively poor; the academic requirements could not be very demanding, as the best students preferred the public institutions; and, consequently, the quality of the education in private institutions was low.

Table 1. Higher education in Brazil, 1991-2006

	1991	2006	growth
Number of institutions (1990-2006) (1)	918	2,270	147.3%
Number of private institutions (1)	696	2,022	190.5%
Total undergraduate enrollment (1)	1,565,056	4,676,646	198.8%
Total of graduate enrollment (1992-2006) (1)	55,338	132,882	140.1%
Number of faculty staff (1)	133,135	316,582	137.8%
Number of full-time faculty (1)	57,728	113,848	97.2%
Faculty with a master's degree (1)		115,113	
Faculty with a doctoral degree (1)		70,716	
Faculty with a master's or doctoral degree (1)	46,758	185,829	297.4%
Population (millions) (2)	149.9	183.5	22.4%
Gross enrollment rate in higher education	7.7%	22.6%	
GNP (US \$) <i>per capita</i> PPP (3)	5,482.1	9,695.2	76.9%

Sources: (1) Brazil, Ministry of Education;

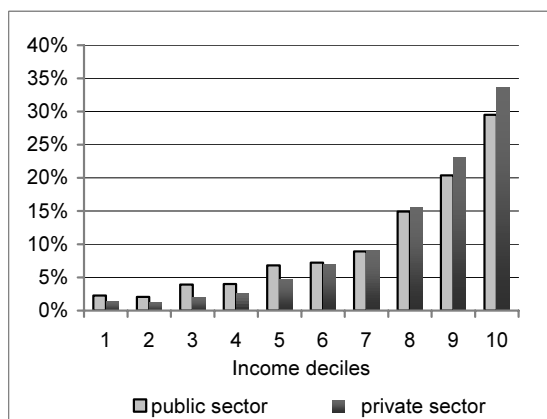
(2) Brazilian Institute for Geography and Statistics (IBGE);

(3) GNP: International Monetary Fund, *2008 World Economic Outlook*.

Both the public and the private sectors, however, are far from homogeneous, and these descriptions, which were never fully accurate, have been changing dramatically in recent years. Admission to public universities can indeed be very competitive in fields like medicine, engineering or law, but it is much easier in fields like education, history, geography or social service. Most teaching in federal universities is provided during the day, but most public state universities

also teach in the evening, and there has been a growing pressure from the federal government on its institutions to increase enrolment and open evening courses.

One consequence of these changes has been some degree of social democratization of access in the public sector, and the emergence of a new, elite segment of private higher education. Compared with a few years ago, public institutions today have more students from lower social backgrounds, while some students from the richest and best educated families may prefer to enter a prestigious private institution rather than a public one. Data for 2006 show that, in public institutions, 2% of the students come from the lowest fifth of the country's income distribution, and 52.2% from the highest fifth; the figures for the private sector are 1.2% and 63.9%, respectively. Thus, a new segment of prestigious, elite private institutions has emerged, particularly in the fields of economics and management.



Source: *National Household Sample Survey*, Brazilian Institute for Geography and Statistics (PNAD-IBGE), 2006.

Figure 1. Students in higher education by income and sector (%)

The creation of an academic profession

How to get qualified academic staff to keep up with this expansion? In the late sixties and early seventies, the Brazilian economy was growing very rapidly, the government's tax basis was also expanding, and the federal government took two initiatives that would change the landscape of higher education and allow Brazil to follow a path that was very different from that of other countries in the region. The first was to create a civil service career for higher education

academics working in federal universities; the second was to adopt the American model of graduate education.

To better understand the impact of these policies, it is important to remember that higher education in Brazil, public and private, has always been geared to teaching for the professions, with the academic staff recruited from among practicing lawyers, medical doctors, engineers and other professionals who taught part-time and earned most of their income from their professional work. Research existed only in some government institutes and a few schools of medicine and agriculture, and, until the 1940s, no institution in the country granted doctoral degrees. Until World War II, only two universities existed in the country, the University of São Paulo, established in 1934 by the state government, and the University of Brazil (now the Federal University of Rio de Janeiro), created in 1940. In the 1950s, the national government created a network of federal universities, bringing together professional schools – some federal, some state, some local or private – that extended throughout the country.

The adoption of the American model of graduate education, superimposed on the professional schools, was the product of initiatives from two different sectors, each with their own values and goals. One was the emerging science and technology sector, gathered originally around the National Research Council and later receiving support from authorities in the Ministry of Economic Planning. For this sector, the goal was to provide Brazil with a critical mass of scientists and engineers who could bring to the country the promises of modern technology, from nuclear energy to advanced weapons, computers and high yielding crops. To do this, it was necessary to provide fellowships for students to go abroad, to create graduate education programs that could recruit the best students and prepare them for advanced work, and to establish competitive research support programs. As much as possible, the new graduate and research programs had to remain free from interference and the bureaucracy of the traditional teaching institutions; for these reasons, support was directed mostly to individuals or newly created autonomous programs within the more traditional institutions.

The other sector was the Ministry of Education, in which an agency for high-level manpower training, CAPES², took responsibility for improving the quality of the higher education teaching staff in the country, a very different and much larger task than training a small elite of high quality researchers. While the Ministry of Education created elaborate legislation regulating the

² An acronym for the Coordination Agency for High Level Personnel Qualification.

establishment and functioning of degree programs in universities, CAPES took the task of establishing a peer-review system to assess the quality of the existing and newly created graduate programs, based on their academic publications and number of degrees granted. Together, CAPES and the National Research Council (and, in the state of São Paulo, the State Foundation for Science Development, FAPESP) provided fellowships for all students who were admitted to the best-rated graduate programs, and also provided several hundred fellowships every year for doctoral studies abroad, and fuelled research money to their departments.

Still, the pace at which this new generation of graduates could be created was much smaller than what was needed by the rapidly expanded higher education sector. To fill the places in the federal universities, the government decided, in the 1970s, to hire a large number of “temporary staff” who were able later to become permanent and secure in civil-service jobs. To be promoted, they needed to have at least a masters’ degree, and a generous program was created to allow them to leave their posts for a few years, keeping their salaries plus a fellowship while completing their degree in some university in the country or abroad. This also stimulated the creation of many graduate programs, mostly at the masters’ level, not always of the best quality, to meet this demand. Many years later, the number of faculty members with graduate degrees has grown considerably in public institutions, but still, in the federal system in 2006, only 50% of the faculty had a doctoral degree. The proportion is much higher in the state universities in São Paulo but lower in other state systems.

The requirement that university staff should have graduate degrees was also extended to the private sector. Private, teaching institutions that do not have university status are supervised by the federal government, with the authority to allow them to function and to decide how many students they can enroll, among other attributions. To gain independence from the government, private institutions need to become universities, and for that one requirement is that they need have at least some graduate education programs and a proportion of their faculty with full-time contracts and advanced degrees. This requirement runs against their bare-bones economic rationale, based on low tuition and part-time teaching staff. They responded by trying to fulfill these requirements at the lowest possible cost, opening masters’ programs in soft fields, and hiring the smallest possible body of full-time, academically trained staff. This was the situation in 1992, and had not changed much in 2007.

Table 2. Employment status and academic qualifications, 2006

	Total	Full-time	Part-time	No contract	Doctoral degree	Masters' degree
Federal	58,078	83.6%	12.9%	3.5%	47.3%	26.9%
State	41,007	73.2%	19.7%	7.1%	40.7%	27.9%
Municipal	7,914	19.0%	17.6%	63.5%	15.3%	39.5%
Private	118,739	13.7%	20.1%	66.2%	9.4%	38.9%
Philanthropic	91,144	19.2%	26.4%	54.4%	16.4%	4'.4%

Source: Ministry of Education, *Higher education Census*, 2006.

In this paper, we argue that the two agendas for the creation of an academic profession in Brazil – that of the R&D establishment, and that of the education authorities, in spite of their similarities of purpose, in fact diverged, and created a situation in which one hindered the other. For most academics, the requirements that they should have a doctoral degree and be scientifically productive is perceived as an external constraint, which they try to accommodate, but which is actually unrelated to their daily activities and teaching requirements. In addition, for the private sector, it means a financial burden that only large institutions can afford, an expense perceived as unrelated to their objectives and to those of their students. For the R&D establishment, it has created a large constituency of research departments and groups of very different standards of quality and relevance, which forces the R&D agencies to spread their resources thinly, and tends to lower the assessment criteria for research support.

In the ideal, “Humboldtian” university, the academics are researchers, work full-time in their institutions, and consider teaching as something which follows from research, rather than as their main priority. In practice, this close association between teaching and research is more likely to occur in graduate education than at undergraduate level, where the distance between the teaching programs and the research agendas of academics is usually wide. This tension exists in all countries, as research tends to be concentrated in a small number of highly qualified institutions, while higher education expands to include an ever larger proportion of the population.

In Brazil, the distance between the research ideal and the reality is so obvious that, both in 1992 and 2007, we decided to stratify the sample of academics in our surveys according to the characteristics of their institutions, in terms of their proximity to the Humboldtian model. In the 2007 survey, the sample was stratified according to whether the institution was public or private, and on whether it was closer to a research institution in the public sector (defined by the number of academics with doctoral degrees) or an elite institution in the

private sector (also based on the number of doctors and full-time contracts). We also included a number of research institutes outside the universities that provided graduate education. The 1992 survey also took these distinctions into account, and, for comparative purposes, it is possible to stratify the 1992 sample by the same criteria, except for the research institutes, which were not included in that survey. In both surveys, the more academic and elite institutions were over-represented.

Professional identities: teaching or research?

Both in 1992 and 2007, we asked academics whether their priority was teaching, research, or both. In the Humboldtian model, they should give priority to research, and place teaching in second place. In fact, there was a significant increase in the priority given to research between those years, but there are many that still give priority to teaching over research, or to the exclusion of research, as the table and figures below indicate.

The decrease of academics declaring priority to teaching only is evidence that the notion that academics should do research has become dominant. In part, this is related to the sheer growth of the proportion of academics with doctoral degrees; but the priority given to research by persons without a doctoral degree also increased in all kinds of institutions, suggesting that the Humboldtian model became accepted as the way things should be, while teaching as a priority lost its legitimacy. However, in 2007 there were still a significant number of academics in private and public institutions who gave no priority to research.

Table 3. Priority to teaching or research, 1992-2007

	Year	Given to teaching	Emphasis on teaching	Emphasis on research	Given to research
Research universities	1992	10.6%	36.6%	47.2%	5.6%
	2007	2.6%	35.6%	55.2%	6.7%
Other public universities	1992	21.4%	39.8%	37.1%	1.7%
	2007	6.1%	42.2%	45.2%	6.5%
Private elite universities	1992	15.7%	38.2%	40.4%	5.6%
	2007	9.9%	40.4%	44.4%	5.3%
Other private institutions	1992	24.4%	45.7%	28.7%	1.2%
	2007	12.3%	49.3%	34.5%	3.9%
Research institutes	2007	0.0%	10.2%	46.9%	42.9%

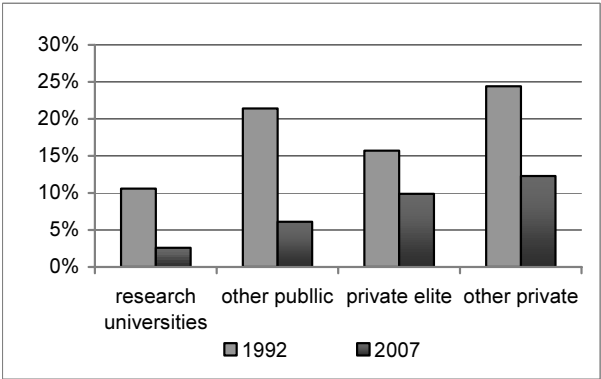


Figure 2. Priority given by respondents to teaching only, 1992-2007

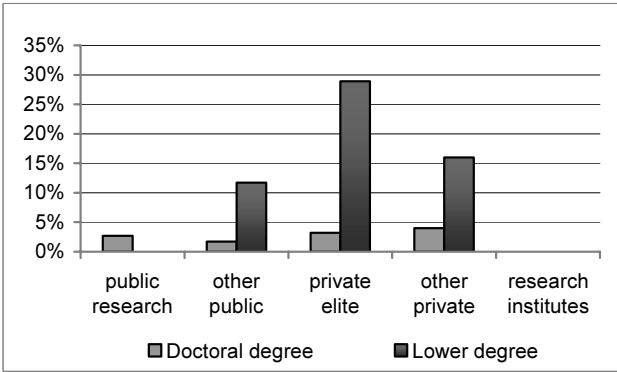


Figure 3. Priority given by respondents to teaching only, by academic degree, 2007

To declare that one’s priority is research does not say much about how this research is being done, or how intense is one’s research work. A basic condition for an academic to do research is to be able to work full-time in his field, and not to have a too heavy teaching load. In Brazil, full-time employment was introduced in public universities to respond to the demands of academics for higher payment, and justified in terms of the need to allow them to do research, which sometimes they do, but sometimes do very little or none. We can see that, in 2007, full-time contracts, which was the rule in public institutions in our sample, reached 50% for academics in private elite institutions, and went down from 34% to 22% in the private, non-elite sector. In the private sector, part-time employment is the rule, except for a small group of academics

who get full-time jobs to meet the formal requirement from the education authorities. Another important difference between the public and private sector is that, while in the public sector all academics have job security, in the private sector they can be dismissed at will.

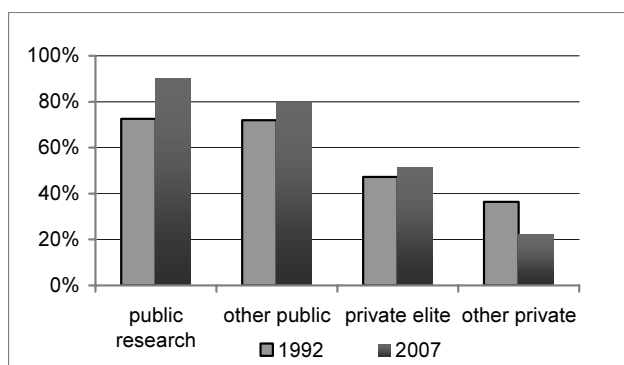


Figure 4. Proportion of academics with full-time contracts

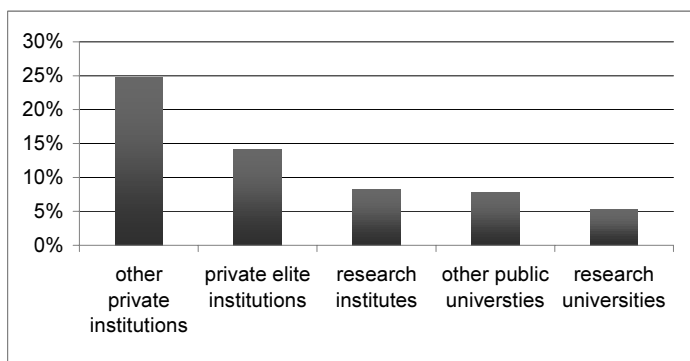


Figure 5. Proportion of academics with another main academic affiliation

A full-time contract, moreover, does not mean that the academics could not have another activity, sometimes legally, sometimes just tolerated by the employing institution. In the 2007 survey, 45.7% of the sample had a secondary job or activity, and sometimes more than one. For academics in the private, non-elite universities, one-quarter of them declared that this was not their main academic institution. The proportion in other sectors was smaller, but still significant.

Table 4. Outside jobs or activities

	Research univ.	Other public univ.	Private elite univ.	Other private inst.	Research institutes
Has another work or job	18.3%	30.7%	50.6%	66.5%	24.5%
Kind of job:					
Other academic institution	6.6%	14.5%	24.0%	39.2%	16.3%
Company	2.5%	6.4%	7.0%	18.9%	2.0%
NGO	4.6%	5.1%	6.4%	7.8%	2.0%
Self-employed	6.6%	11.8%	21.6%	19.8%	2.0%

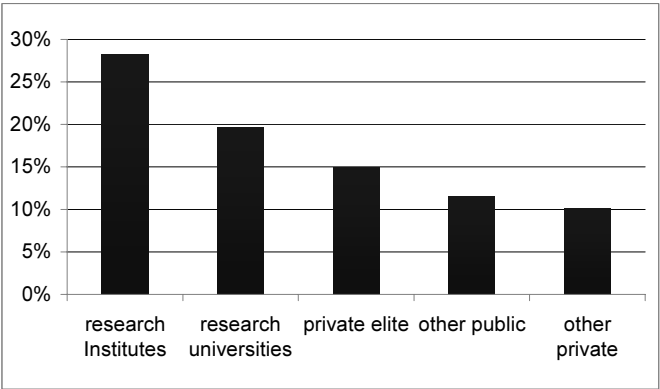


Figure 6. Proportion of academics with doctoral degrees obtained abroad (2007)

Moreover, a “doctoral degree” can mean different things. One important difference is whether it was obtained in Brazil or abroad. Brazil has a significant number of high quality doctoral programs, but it is possible to assume that a degree obtained in a good university abroad would provide a better qualification, on average, than a degree obtained in Brazil. In 1992, 35% of the academics with doctoral degrees had obtained them abroad; in 2007, only 15% did. There were important differences among institutions in terms of where their doctors got their degrees, with more persons with foreign degrees in research-intensive institutions than elsewhere.

Finally, different institutions specialize in different fields of knowledge. In the public universities, the health sciences have the largest number of academics; in the private sector, most of the academics are in the social sciences and professions; in the research institutes, the hard sciences prevail.

Table 5. Field of highest degree by type of institution

	Research univ.	Other public univ.	Private elite univ.	Other private inst.	Research institutes
Education	4.9%	12.6%	3.8%	13.5%	
Arts, humanities	6.0%	9.0%	5.6%	6.5%	2.1%
Social science	8.2%	8.3%	18.8%	13.3%	10.4%
Business and economics	3.3%	7.9%	25.0%	13.1%	2.1%
Law	2.2%	1.4%	7.5%	8.6%	
Life science	6.0%	9.0%	3.1%	2.9%	10.4%
Physics, mathematics	15.2%	7.6%	11.9%	3.8%	43.8%
Engineering	14.7%	10.8%	11.3%	6.3%	14.6%
Agriculture	3.3%	4.3%		1.4%	
Health sciences	27.2%	18.0%	4.4%	17.3%	2.1%
Other	9.2%	11.2%	8.8%	13.3%	14.6%

In short, while the number of academics with doctoral degrees increased, and in spite of the fact that the notion that research should be the priority became widespread, Brazilian higher education is still far from reaching the Humboldtian ideal of research-intensive universities and research-based academic careers. The differences between different types of institutions do not seem to be narrowing. In all institutions, academics with doctoral degrees are distinctly older than their non-doctoral colleagues, and, given the relatively high age of the latter, is not likely that they will eventually reach the academic levels of their elders. The youngest group of academics is those without doctoral degrees in the rapidly expanding private sector, which is clearly not giving priority to the academic credentials of their teaching staff.

Table 6. Mean age, by academic degree and institution

	Doctoral degree	No doctoral degree	Total
Research universities	48.0	45.3	47.9
Other public universities	47.0	41.4	44.9
Private elite universities	47.5	46.8	47.3
Other private institutions	43.9	41.2	42.0
Research institutes	46.4	54.5	46.7
Total	46.6	41.9	44.6

The real life of academics, 2007

Academic life in Brazil is not perceived as a particularly demanding occupation. Of the respondents in 2007, 65% declared that they were very satisfied or satisfied with their work: from 60% in the public, non-research universities up to 81.2% in the research institutes. When asked about changes in the working conditions for teaching and research, there is a lower consensus: about a third believes that the conditions have improved, another third that they have not changed, and another third that they are worse now. There are important differences according to the type of institution. On a scale from 1 to 5, academics in research institutes tend to believe that the conditions for research have remained stable in recent years (2.5 on average), while all others believe that the conditions have deteriorated (3 points and above). All believe that the conditions for teaching have deteriorated still further, with a slightly better assessment for the private elite institutions and the research institutes, which only teach selected graduate students.

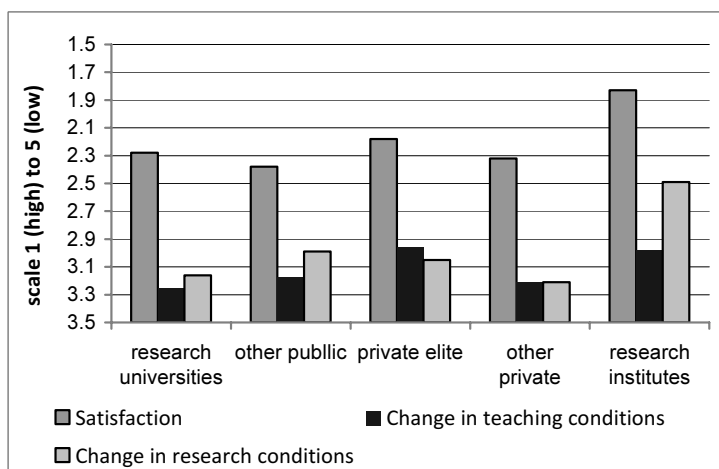


Figure 7. Assessment of working conditions

What do the academics do, in practice? In the 2007 survey, we asked how many hours the academics spent every week in different activities – teaching, research, extension work, administration and other activities. For many, these activities could not be easily separated, and the sum of the time allocated to these different activities very often went beyond the 40 hours which would be the

standard 8 hours, five days work load. Most of the time was spent on teaching, and only in the research institutes did a majority of the staff work more than 20 hours a week on research. The academic degree was much less important, in explaining the dedication to research, than institutional location. In the private, non-elite institutions, 21.6% of those with a doctoral research degree did no research at all, while another 51.4% spent less than 10 hours a week on it.

Table 7. Proportions of respondents spending more than 20 hours *per week* on each academic activity

	Research univ.	Other public univ.	Private elite univ.	Other private inst.	Research institutes
Teaching	28.5%	43.9%	43.8%	49.6%	52.3%
Research	13.5%	18.5%	15.4%	7.1%	81.0%
Extension	6.4%	9.3%	9.1%	7.6%	41.7%
Administration	7.0%	12.3%	11.3%	8.0%	44.4%
Other activities	4.3%	9.6%	5.4%	6.5%	41.7%

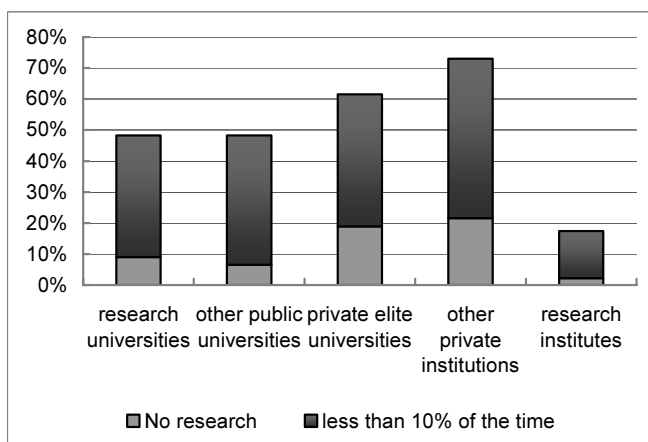


Figure 8. Proportion of respondents with doctoral degrees doing little research, by type of institution

Scientific productivity

The efforts to increase the number of holders of doctoral degrees in research-oriented graduate programs led to a steady increase in the number of

papers published by Brazilians in the international literature.³ The international presence of Brazilian science is still very small – about 1.8% of the world total – but is by far the largest in the region, amounting to 51% of the Latin American total in 2007.

However, this production is concentrated in a few institutions. In our sample, half of the published articles in the last 3 years came from just 11 institutions. Besides, there is very little in terms of patents. On average, the academic productivity of holders of doctoral degrees in research institutes is higher in all items, and they also show more published articles than the conference papers, which prevail in other institutions.

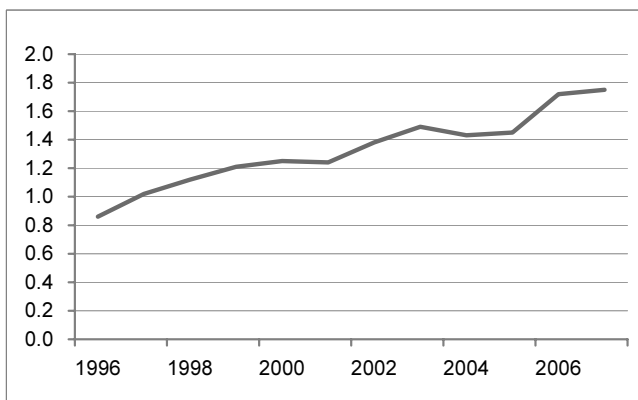


Figure 9. Brazil, production of academic papers as a proportion of the world total, 1996-2007 (%)

Academics in the research institutes not only publish more, but most of their published articles are peer-reviewed and international in character - published abroad, in a language other than Portuguese, and in partnership with researchers from other countries. In this, as in other dimensions, the academics in the research institutes come much closer to the ideal type of an academic professional than those in other institutions.

³ Data from The SCImago Journal & Country Rank, <http://www.scimagojr.com/index.php>, based on the Scopus data base (Elsevier).

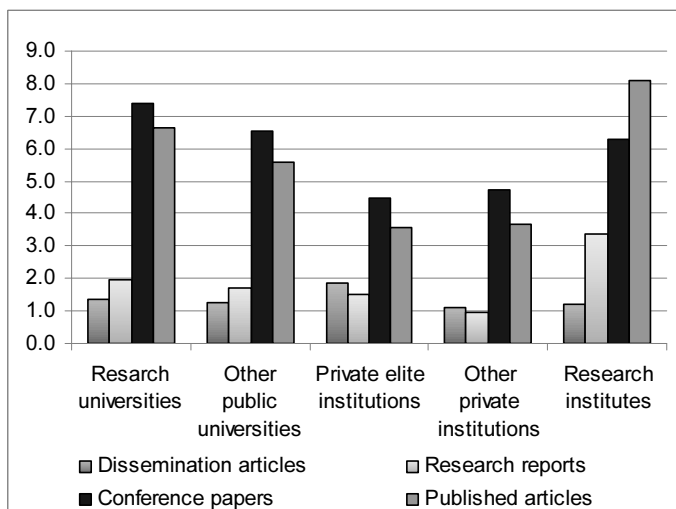


Figure 10. Numbers of academic publications in the last three years (doctoral degree holders)

Table 8. Characteristics of published articles

	Research univ.	Other public univ.	Private elite univ.	Other private inst.	Research institutes
Published in a language other than Portuguese	42.9%	57.4%	38.4%	27.3%	72.4%
In co-authorship with a Brazilian colleague	65.4%	35.1%	57.8%	54.2%	60.2%
In co-authorship with a colleague abroad	16.6%	7.5%	11.3%	6.1%	35.3%
Published abroad	36.2%	26.3%	31.0%	18.5%	66.4%
On-line	33.4%	30.9%	33.3%	27.9%	46.6%
In a peer-reviewed journal	71.7%	35.7%	53.6%	13.5%	90.9%

Institutional and external constraints on research

Most of the research in the country is supported by national research agencies. Academics without a doctoral degree, mostly in private institutions, have to rely more on resources provided by their own institutions, which are

fewer, and with lower requirements in terms of academic quality. Brazilian science is mostly supported by national resources, but academics with higher credentials are more able to get resources from abroad.

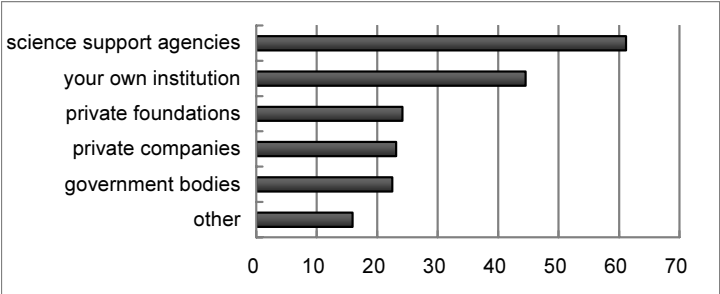


Figure 11. Sources of support for research

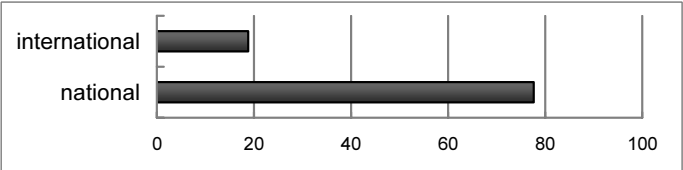


Figure 12. Sources of support for research

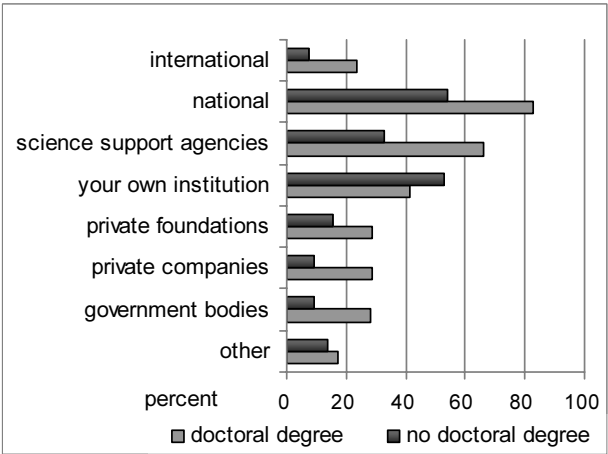


Figure 13. Research support by academic degree

The institutional context affects also the different priorities of the researchers. Compared with the other institutions, research in the institutes is more theoretical and more international in scope and orientation; in private institutions, it tends to be more applied and practical, and also more socially oriented, reflecting the fact that most researchers in these institutions are in the social sciences.

Table 9. Emphasis of main research project

	Research univ.	Other public univ.	Private elite univ.	Other private inst.	Research institutes	Significance (Anova)
Social, to improve society	2.82	2.46	2.76	2.26	3.44	0.000
International in scope and orientation	3.26	3.61	3.04	3.99	2.66	0.000
Applied, practical	2.19	2.07	2.11	1.95	2.72	0.001
Basic, theoretical	2.49	2.41	2.57	2.47	1.74	0.002
Disciplinary	3.69	3.85	3.65	4.02	3.64	0.093
Multi-disciplinary	2.04	1.95	1.82	1.81	2.09	0.147
Commercial, technological transfer	4.15	3.98	4.01	3.92	4.42	0.188

Note: 1="strong emphasis"; 5= "no emphasis".

The main external constraints the academics perceive on their research work is the increased pressure to get external funding for their work, and they feel that these pressures, both for high scientific productivity and practical results, are a threat to the academic quality of their work. Clearly, those in research institutes feel these pressures more than those in universities. Otherwise, the only main difference among institutions is the priority private institutions place on applied and commercial research, and the restrictions they place on the publication of results from privately supported research.

Another perspective on the external constraints can be obtained by looking at who assesses the work done by the academics. Most of the assessment refers to teaching, and is done both by institutional authorities and students. At the other extreme, services are not assessed systematically by anybody. Regarding research, in most cases, and particularly in public research universities, assessment is collegial. In private institutions, as well as in the research institutes, institutional authorities – heads of departments, officers – have a much stronger say. In private, non-elite institutions, there is little assessment by

external reviewers, and almost half of the respondents say that assessments, if any, are done by themselves.

Table 10. External constraints on research

	Research univ.	Other public univ.	Private elite univ.	Other private inst.	Research institutes	Total	Sig.
Increased pressures to get external funding	2.3	2.3	2.2	3.0	2.2	2.5	0.00
High expectation of scientific productivity is a threat to research quality	2.3	2.7	2.5	2.7	2.4	2.6	0.12
Emphasis on interdisciplinary research	2.8	2.7	2.5	2.7	2.4	2.7	0.01
High expectations of productivity	2.7	2.8	2.8	2.8	2.4	2.8	0.23
Research support should focus on the more productive researchers	3.2	3.1	2.8	3.0	2.9	3.0	0.05
Clients do not influence	3.0	3.2	3.0	3.2	2.9	3.1	0.41
Emphasis on applied research	3.4	3.5	3.1	3.3	3.6	3.4	0.04
Increased restrictions on publishing commercial research	4.0	3.9	4.0	3.7	4.2	3.9	0.01
Increased restriction on publishing public research	3.9	4.2	4.8	3.7	4.2	4.1	0.34

Note: 1= "fully agree"; 5= "fully disagree".

Table 11. Who assesses your work, by academic activity

	Research	Teaching	Services
Peers in the institution	43.5%	46.5%	34.1%
Head of department	36.8%	64.7%	42.8%
Members of other departments	30.0%	18.3%	20.5%
Officer of institution	27.3%	26.9%	37.5%
Students	11.3%	81.6%	23.2%
External reviewers	43.7%	11.7%	13.8%
Yourself (formally)	37.6%	47.8%	36.5%
Nobody	9.2%	5.2%	16.2%
Total (100%)	924	1,158	790

Table 12. Who assesses your research, by type of institution

	Research univ.	Other public univ.	Private elite univ.	Other private inst.	Research institutes
Peers in the institution	63.5%	52.6%	42.3%	24.6%	43.8%
Head of department	27.0%	31.1%	45.5%	40.9%	56.3%
Members of other departments	36.5%	35.9%	31.7%	20.4%	31.3%
Officer of institution	19.0%	21.5%	31.7%	34.8%	29.2%
Students	7.4%	10.8%	9.8%	16.0%	2.1%
External reviewers	55.6%	53.0%	51.2%	25.6%	47.9%
Yourself (formally)	32.3%	36.7%	51.2%	25.6%	47.9%
Nobody	7.9%	6.0%	4.1%	15.3%	4.2%
Total (100%)	189	251	123	313	48

Conclusions: converging beliefs, diverging practices

This overview of the way the Brazilian academics relate to research show that the efforts, started in the 1970s, to turn the academics in Brazil into academic researchers, has succeeded in part in terms of beliefs, but does not seem to be converging in practice. Today, more than in the past, academics believe that they should have a doctoral degree and get involved in research, and the incentives created by the national authorities tend towards that direction. However, in practice, only a minority of researchers in research institutes and in research-intensive public universities can meet these values and incentives. For the others, the alternative is either to give up, and place more emphasis on teaching, or to make some gestures signaling their adherence to the research ideals – attending conferences, writing research reports, and trying to publish an article every year or so. The need to comply with the research ideal, and the inability to do so, is a fertile ground for accommodation and cynicism, which can affect the quality of the missions that higher education institutions are supposed to perform – teaching, research, and services.

This is clearly not a good situation, and the solution to the problem does not seem to consist in pouring more resources and effort in order to turn each of the academics working in Brazilian higher education into a researcher. The best policy would be to concentrate the research effort in places and institutions where good quality and relevant research can really take place, and to provide

renewed status, prestige and support for the functions of general education and teaching for the professions, which were, and remain, the main objectives of higher education.

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